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REMARKS/ARGUMENTS

Applicant would like to thank the Examiner for the thorough review of the present application. Based upon the amendments and the following remarks, Applicants respectfully request reconsideration of the present application and allowance of the pending claims.

The Present Invention

The invention is a method for dynamic bandwidth management on a per subscriber basis. The user/subscriber can independently set and adjust independently the uplink and downlink bandwidths of their network access service. Thus, the user/subscriber can efficiently manage their network access according to the specific activity on the network.

For example, a user/subscriber can select a relatively high maximum bandwidth for the downlink connection when accessing data-intensive content over the network, or a relatively low bandwidth for the downlink connection when accessing less data-intensive content over the network. The change in bandwidth service level is automatically made substantially instantaneously, and the user/subscriber begins receiving service at the new bandwidth and, in most instances, at a corresponding new billing rate. Likewise, the user/subscriber can increase or decrease the bandwidth of the uplink connection so the user/subscriber only purchases the amount of bandwidth appropriate for their network activity.

35 U.S.C. § 103 (a) Rejections

Claims 1-5, 7-11, and 13 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over United States Patent No. 5,793,978, issued to Fowler (the '978 Fowler patent) in view of United States Patent No. 5,787,483, issued to Jam et al., (the '483 Jam patent).

Specifically, according to the Office Action, the '978 Fowler patent teaches the following elements of independent Claim 1:

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A method for dynamic control of data transfer by a subscriber during an on-going network session (Column 1, lines 42-56), comprising:

receiving a data packet at a gateway device (Figure 1, node 101, "viewed as a Gateway device");

retrieving an operator selected bandwidth for a subscriber associated with the data packet (Column 1, lines 53-56, operator specifies a transfer rate; Column 1, lines 46-48, broadcast queue is limited to the selected amount of communication bandwidth);

determining if the transfer rate for data packet transmission should be limited based on the subscriber selected bandwidth (Column 1, lines 49-52); and

limiting a transfer rate for data packet transmission based on the outcome of the determination process (Column 1, lines 46-48).

Additionally, according to the Office Action the '978 Fowler patent does not disclose that the operator is a subscriber. However, the Examiner believes that the '483 Jam patent teaches a communication system having a plurality of subscribers transferring and receiving data packets (Frame 1 and Column 5, lines 20-26)

According to the Office Action it would have been obvious to combine the teachings to "have the operator be a subscriber because both Fowler and Jam teach data packet communication with a user sending or receiving data."

The '978 Fowler Patent Does Not Teach or Suggest Bandwidth Management on a Per Subscriber Basis

The '978 Fowler patent does not address bandwidth management on a *per subscriber* basis. The '978 Fowler patent teaches a method for bandwidth management based on whether the packet is a broadcast packet. If the packet is determined to be a broadcast packet, the packet may be queued for delayed transmission. This method of bandwidth management applies to all

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of the users or subscribers that access the network via the gateway device. As such, all of the users in the invention taught by the '978 Fowler patent would receive the same bandwidth, with limited bandwidth being applied to broadcast packets.

In the present invention data packets are received by the gateway device and the subscriber's (i.e., users) identity is determined based on an identifying feature of the packet. Once the subscriber is determined, the gateway device accesses memory that stores the subscriber's profile. Included within the profile is subscriber-selected bandwidth, this bandwidth is then applied to all data packets that are determined to be associated with the subscriber. A determination is made as whether the transfer rate of the subscriber's packets need to be adjusted based on the subscriber-selected bandwidth. If it is determined that such adjustment is necessary then the gateway device provides such adjustment.

Claim 1 has been amended to provide clarity as to the method described above. Specifically, steps in the method are provided for identifying the subscriber based on the data packet and retrieving from memory the subscriber's profile that includes the subscriber-selected bandwidth. Confusion existed in the originally presented claim in that the term 'operator selected bandwidth' and 'subscriber selected bandwidth' were used interchangeably. Based on the use of the term "operator selected bandwidth" in the previously presented Claim 1, the Examiner relied on the teachings in the '978 Fowler patent, at Column 1, lines 53-56. However, in the teachings of the '978 Fowler patent, the "operator" is the gateway device operator or administrator and not the subscriber or user. This is further evident by the teaching at Column 3, line 40 - Column 4, line 5, in which, the gateway device operator sets the rate of packet transmission in terms of packets per second and packet bytes second.

Based on the fact that the '978 Fowler patent does not teach retrieving a subscriber's profile that includes subscriber-selected bandwidth and determining if the transfer rate of the subscriber's transmission should be adjusted based on the subscriber-selected bandwidth, the teachings in the '978 Fowler patent are clearly distinguishable from the present invention.

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For this reason, applicant respectfully submits that independent Claim 1, which has been rejected under 35 U.S.C. § 103 (a) as being unpatentable over the cited '978 Fowler patent in view of the '483 Jam patent, are thus, patentable.

In addition, the dependent Claims that depend from Claim 1, specifically Claims 3, 6-13 add further limitations to the independent claim and, as such, as a matter of law, if the independent claim is found patentable so too should the accompanying dependent claims.

The '978 Fowler Patent Does Not Teach or Suggest Bandwidth Management Based upon Subscriber-Selected Bandwidth

As noted above, the '978 Fowler patent provides no teaching of bandwidth management on a per subscriber basis. In addition, the '978 Fowler patent provides no teaching that management of the bandwidth will be conducted based upon bandwidth selected by the subscriber or user.

In the present invention, the subscriber may select bandwidth at the onset of a network session, dynamically during an ongoing network session or the subscriber may set a static bandwidth, typically upon first-time access to the network, which remains in effect whenever the subscriber establishes a network session. As Claim 1 specifically states, the bandwidth in the subscriber's profile, which is accessed to determine transfer rate of the subscriber's data packets, is a subscriber-selected bandwidth. This limitation reflects the fact that the bandwidth is not determined by the gateway device administrator or any other network administrator.

For this reason, applicant respectfully submits that independent Claim 1, which has been rejected under 35 U.S.C. § 103 (a) as being unpatentable over the cited '978 Fowler patent in view of the '483 Jam patent, are thus, patentable.

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In addition, the dependent Claims that depend from Claim 1, specifically Claims 3, 6-13 add further limitations to the independent claim and, as such, as a matter of law, if the independent claim is found patentable so too should the accompanying dependent claims.

As such, applicant respectfully submits that the independent claim, which has been rejected under 35 U.S.C. § 103 (a), as well as the dependent claims that depend there from, are not unpatentable by legal standards and, are thus, patentable.

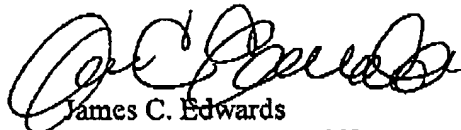
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Conclusion

In view of the proposed amended claims and the remarks submitted above, it is respectfully submitted that the present claims are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicant's undersigned attorney to resolve any remaining issues in order to expedite examination of the present invention.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

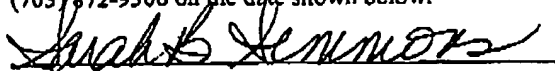
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